

FIG. 2

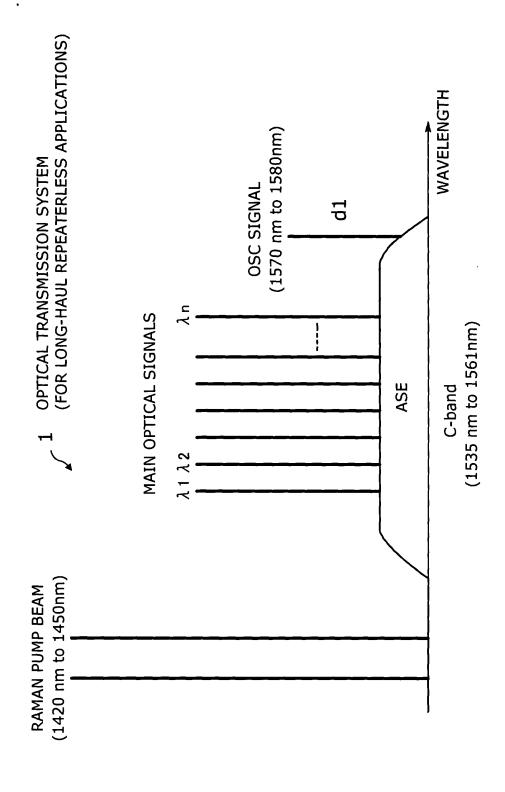


FIG. 3

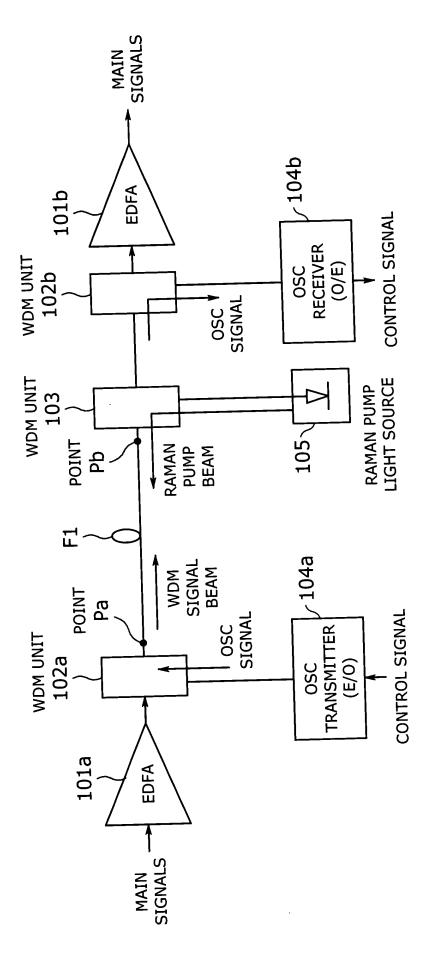
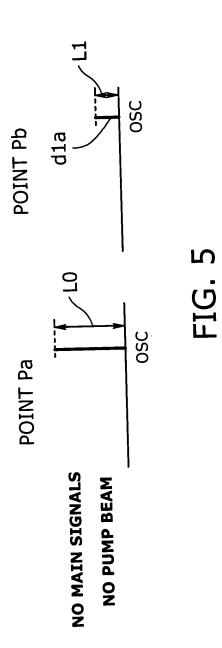


FIG. 4



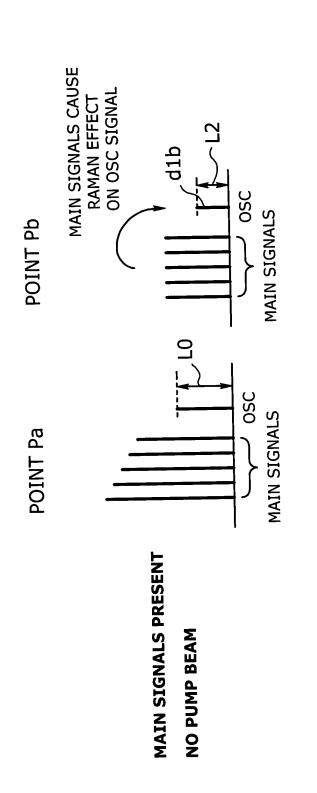


FIG. 6

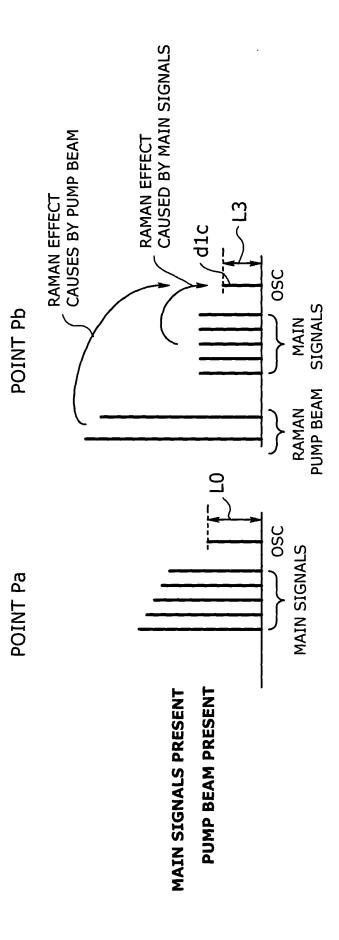
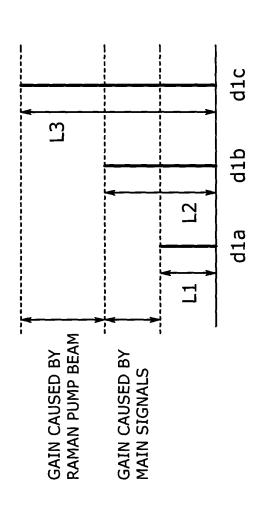


FIG. 7

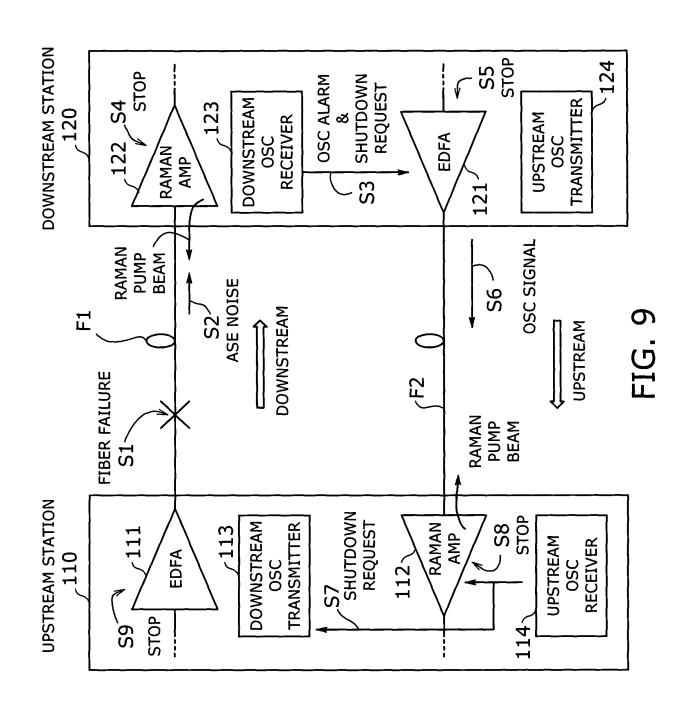


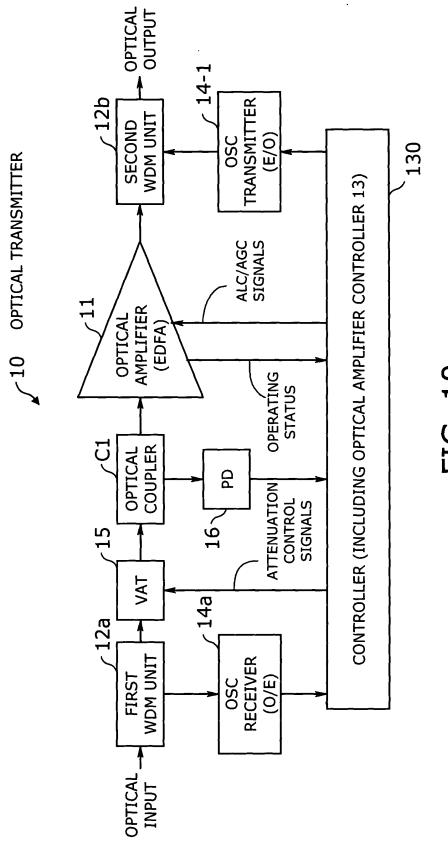
NO AMPLIFICATION (NO COMPENSATION FOR TRANSMISSION LINE LOSS) L1:

L2: LEVEL L1 + AMPLIFICATION EFFECT OF MAIN SIGNALS

LEVEL L1 + AMPLIFICATION EFFECT OF MAIN SIGNALS AND RAMAN PUMPING LIGHT L3:

FIG. 8





OPTICAL TRANSMITTER

FIG. 10

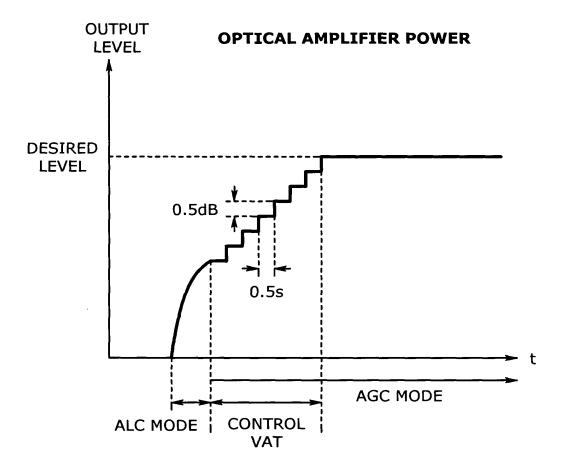


FIG. 11

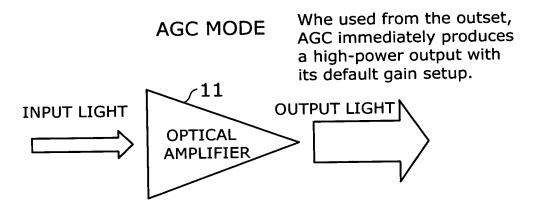


FIG. 12(A)

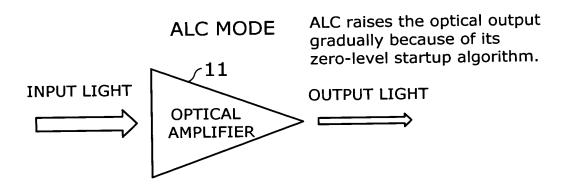


FIG. 12(B)

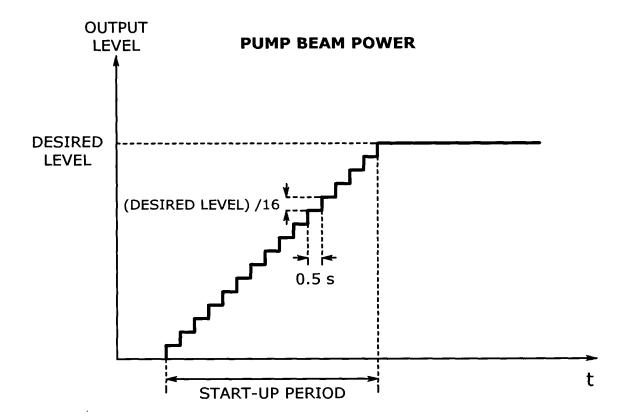


FIG. 13

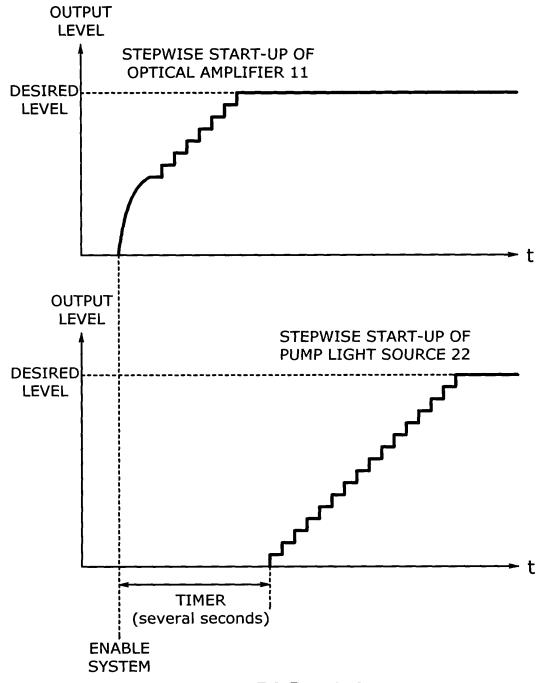
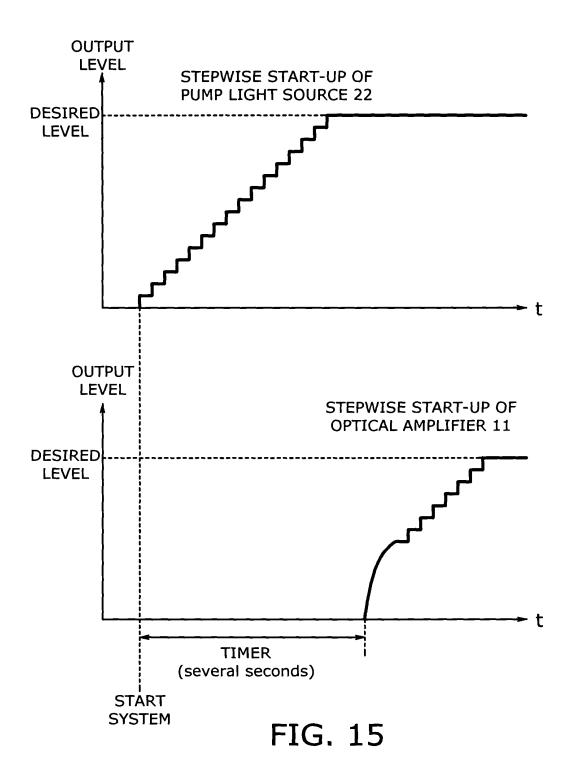
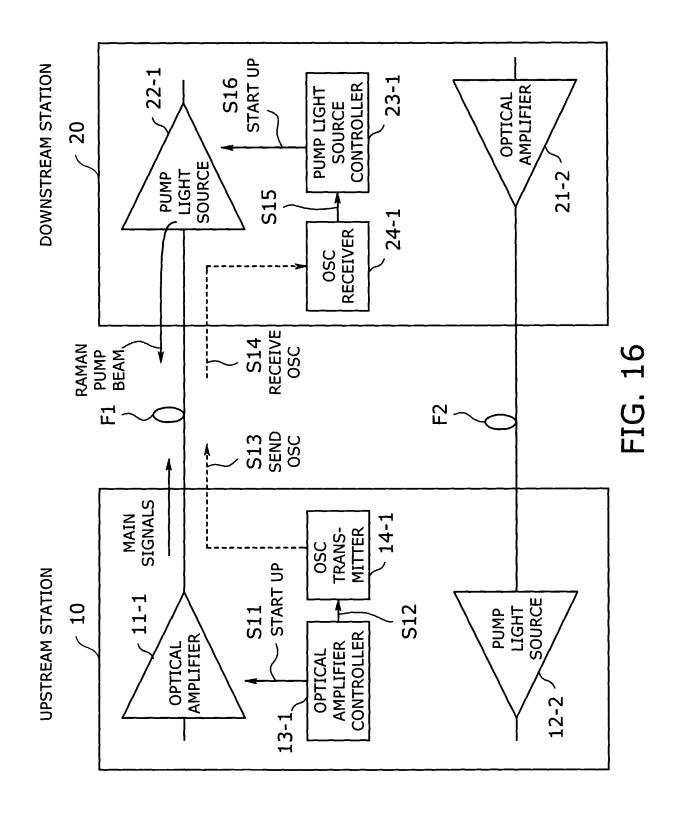
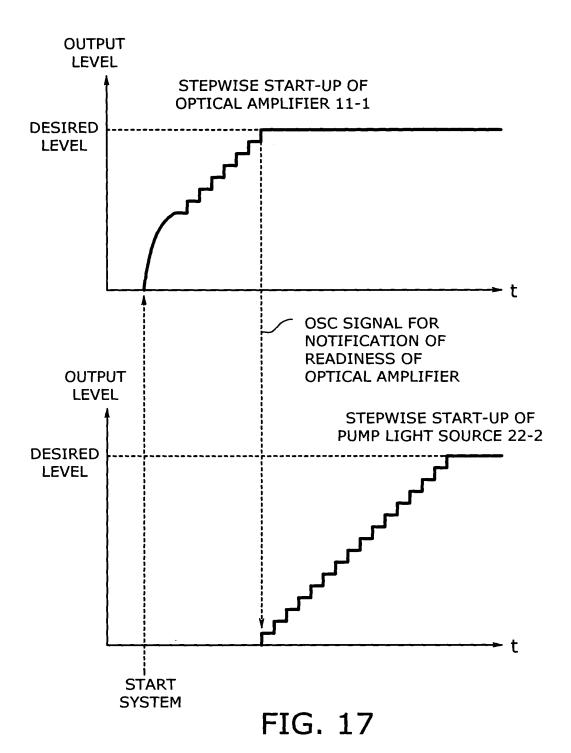
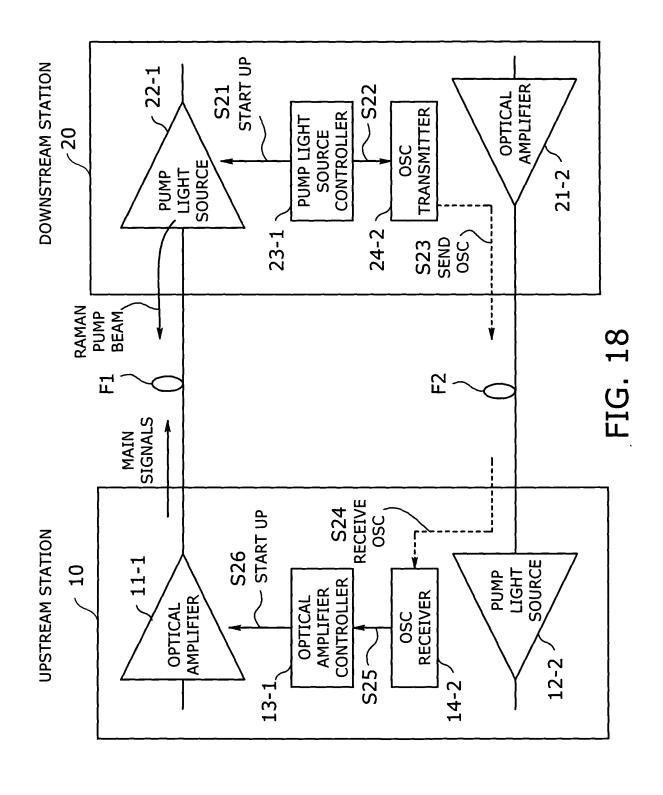


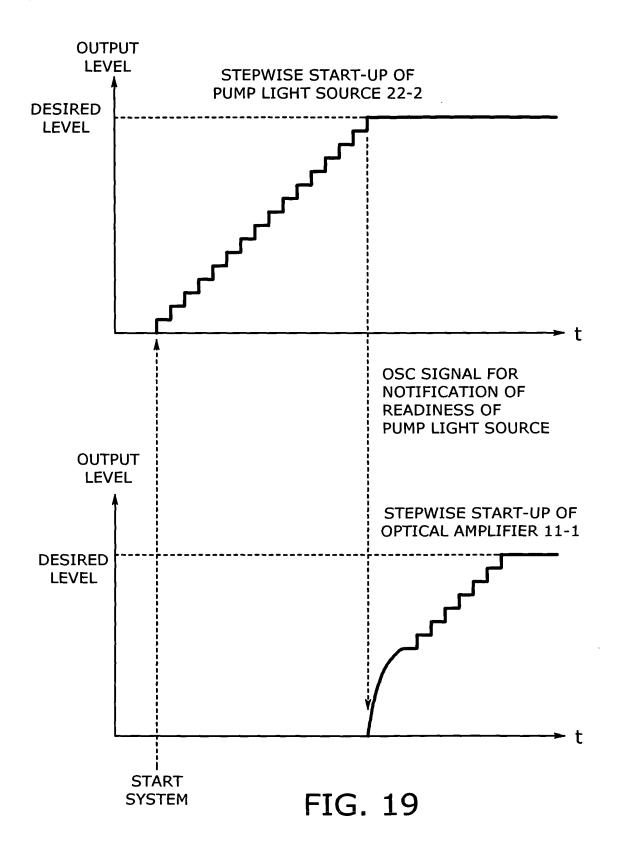
FIG. 14











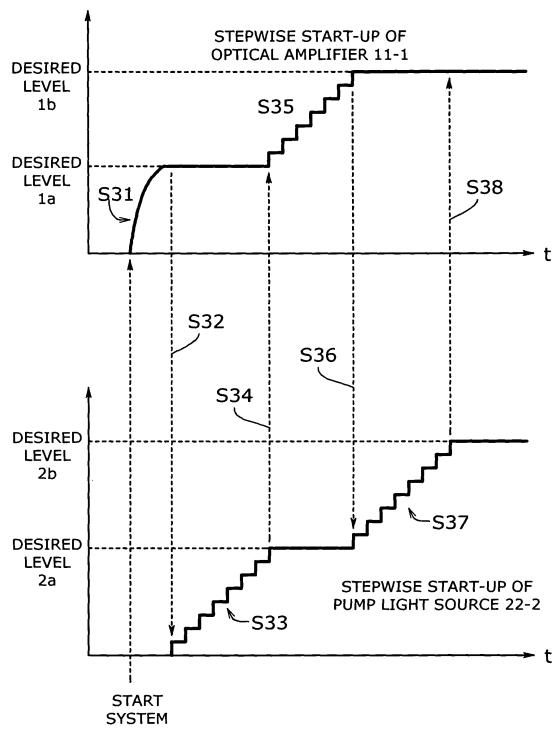


FIG. 20

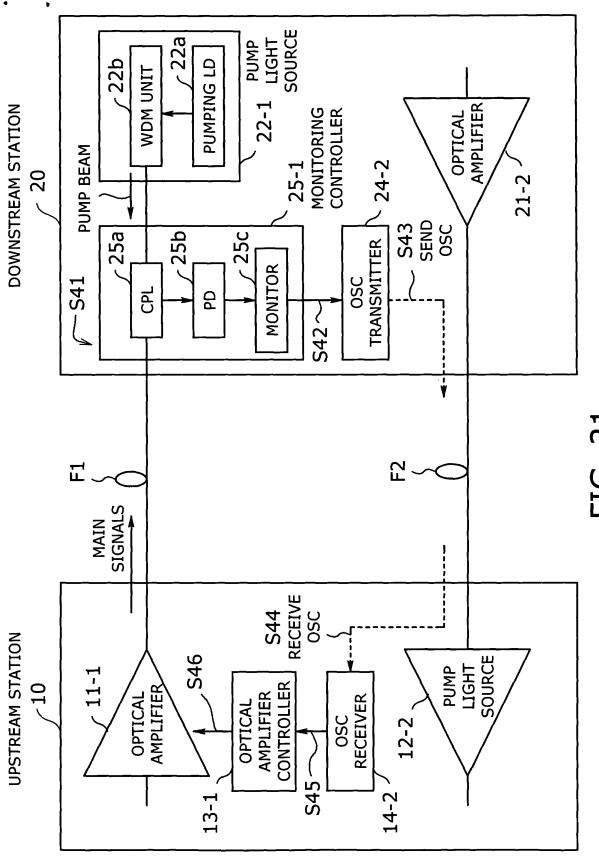
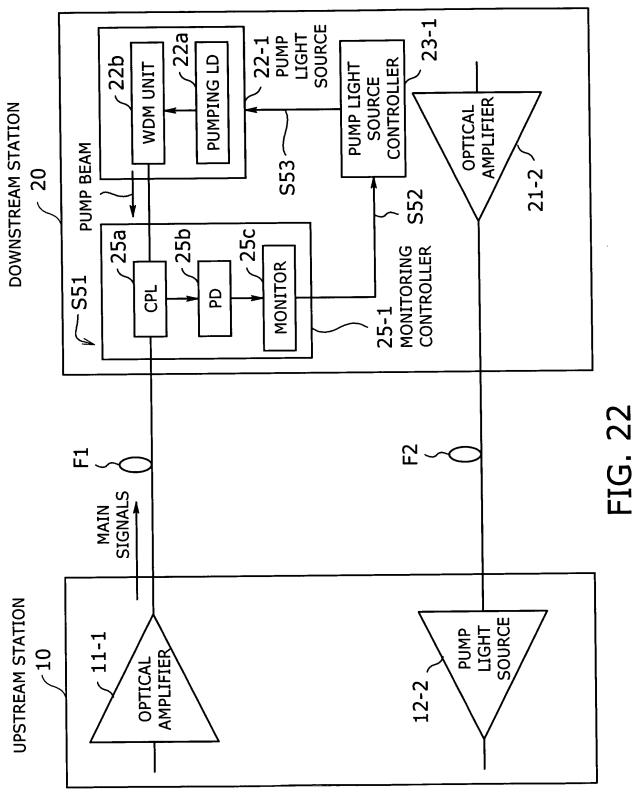


FIG. 21



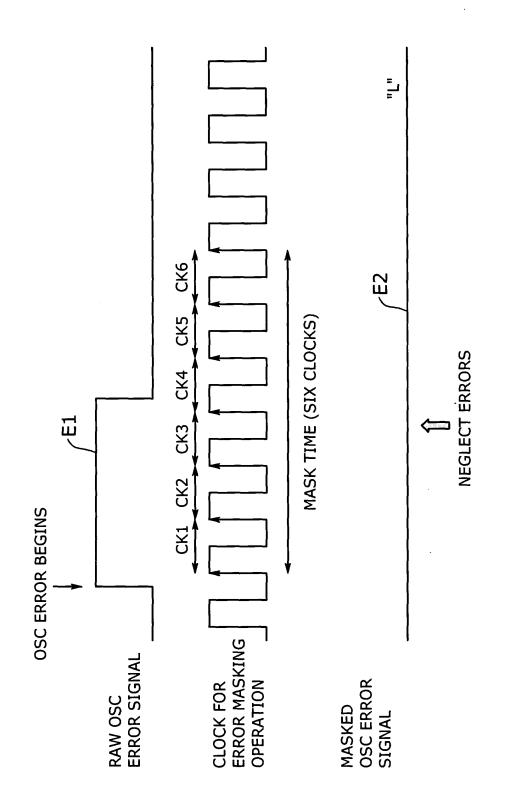


FIG. 23

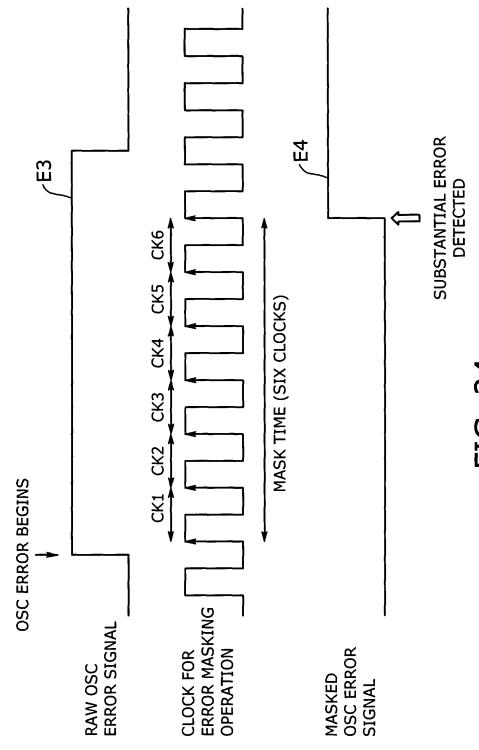


FIG. 24

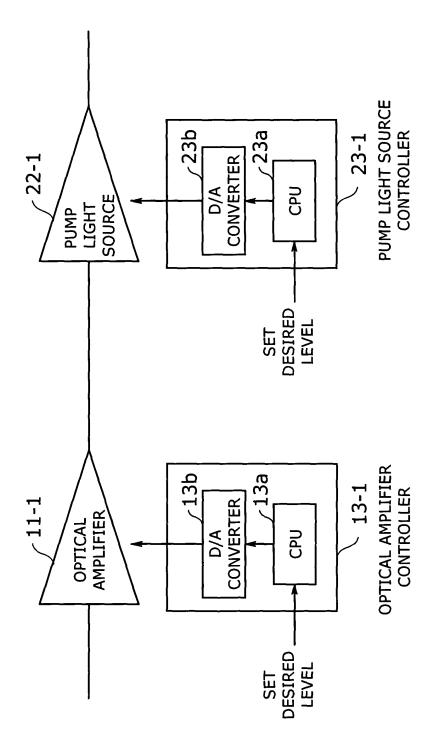


FIG. 25

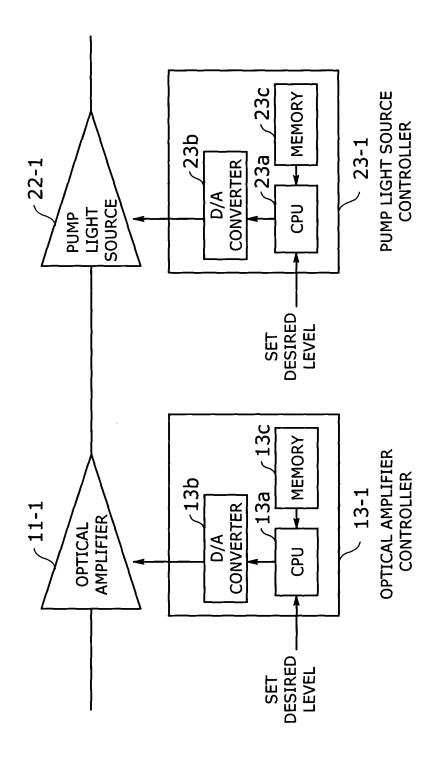


FIG. 26